Libby Asbestos Site
Conceptual Site Model
Operable Unit 4

July 11, 2006

Flathead Valley Community College

Libby, Montana

Roadmap

- Superfund Programs
- Superfund Remedial Process
- Baseline Risk Assessment
- Conceptual Site Model

Superfund Programs

Removal Actions

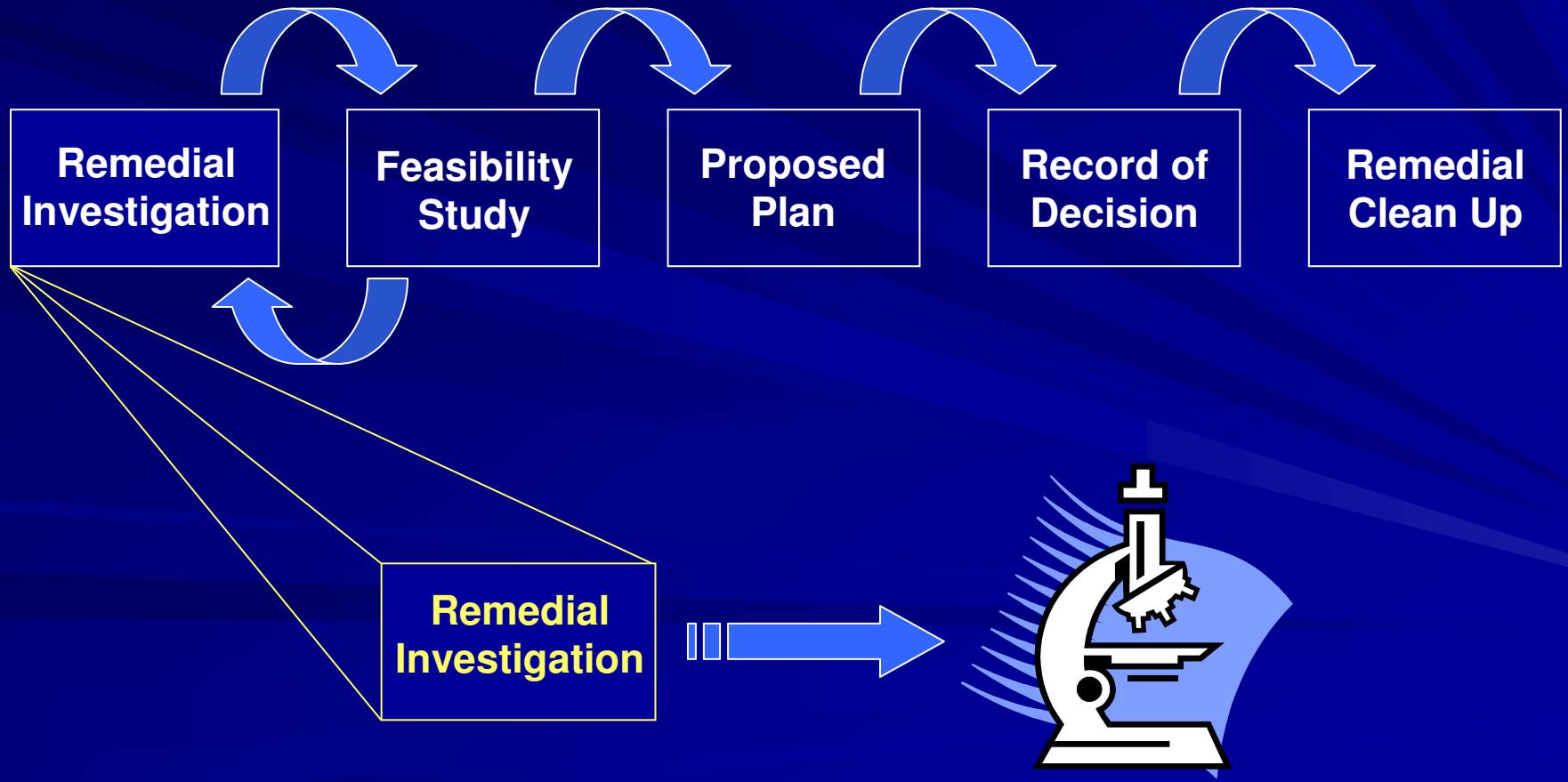
Remedial Actions

- Emergency cleanups
- Immediate, short-term response
- Protection from immediate threats
- NPL or non-NPL sites

- Non-emergency cleanups
- Long-term cleanups
- Minimize release of hazardous substances
- Reduce public health risks

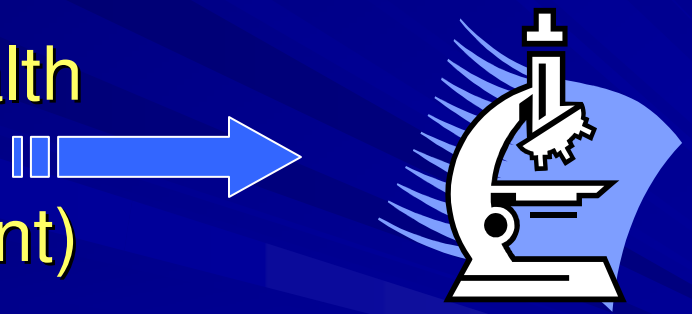
The Superfund Remedial Process

Long-term Protective Actions



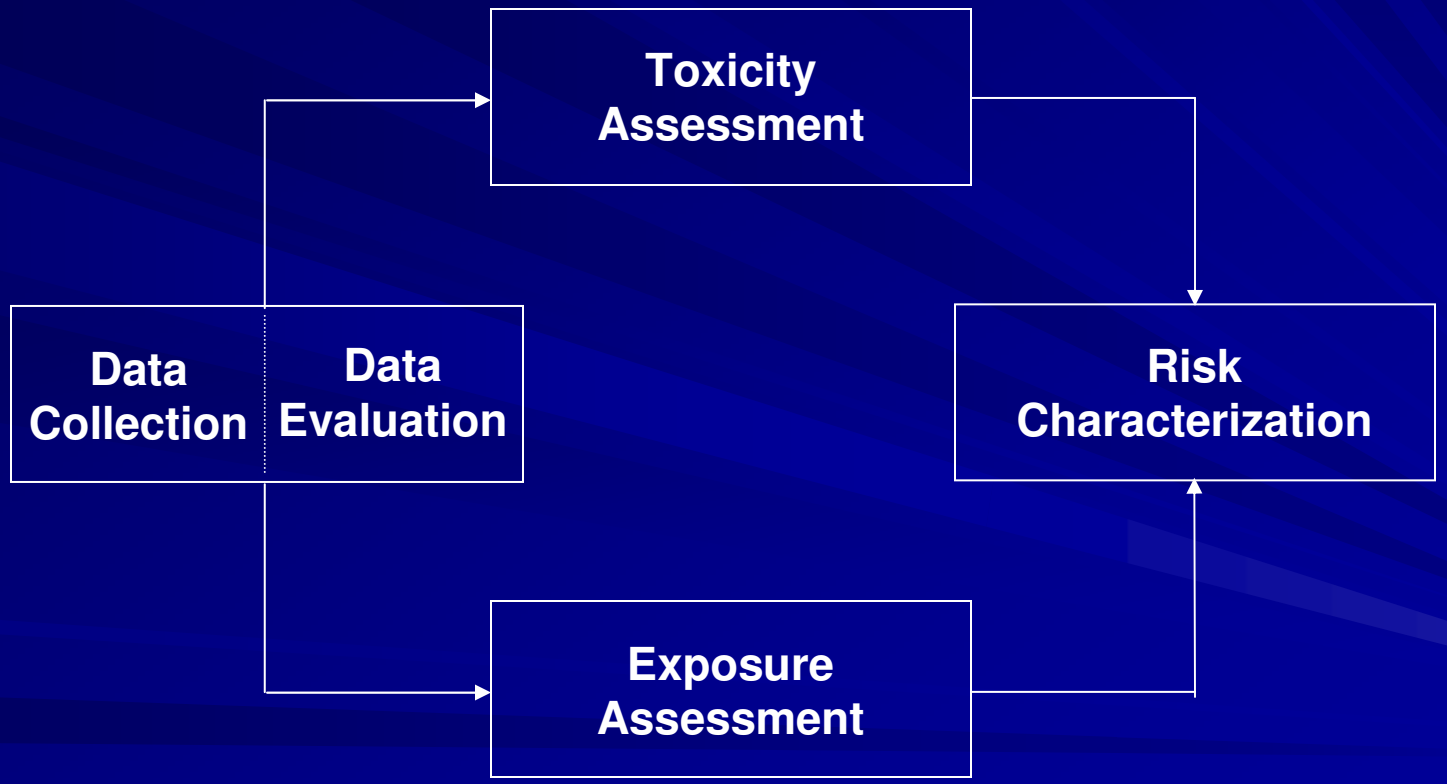
Remedial Investigation

- Serves as mechanism for collecting data to
  - Characterize nature and extent of contamination
  - Assess risk to human health and the environment (Baseline Risk Assessment)



  - Support the Feasibility Study

Baseline Risk Assessment
Human Health



Baseline Risk Assessment
Human Health

- Identifies primary health threats at the Site
- Identifies existing or potential risks that may be posed to human health at the Site
- Provides valuable input to the development and evaluation of alternatives during the Feasibility Study

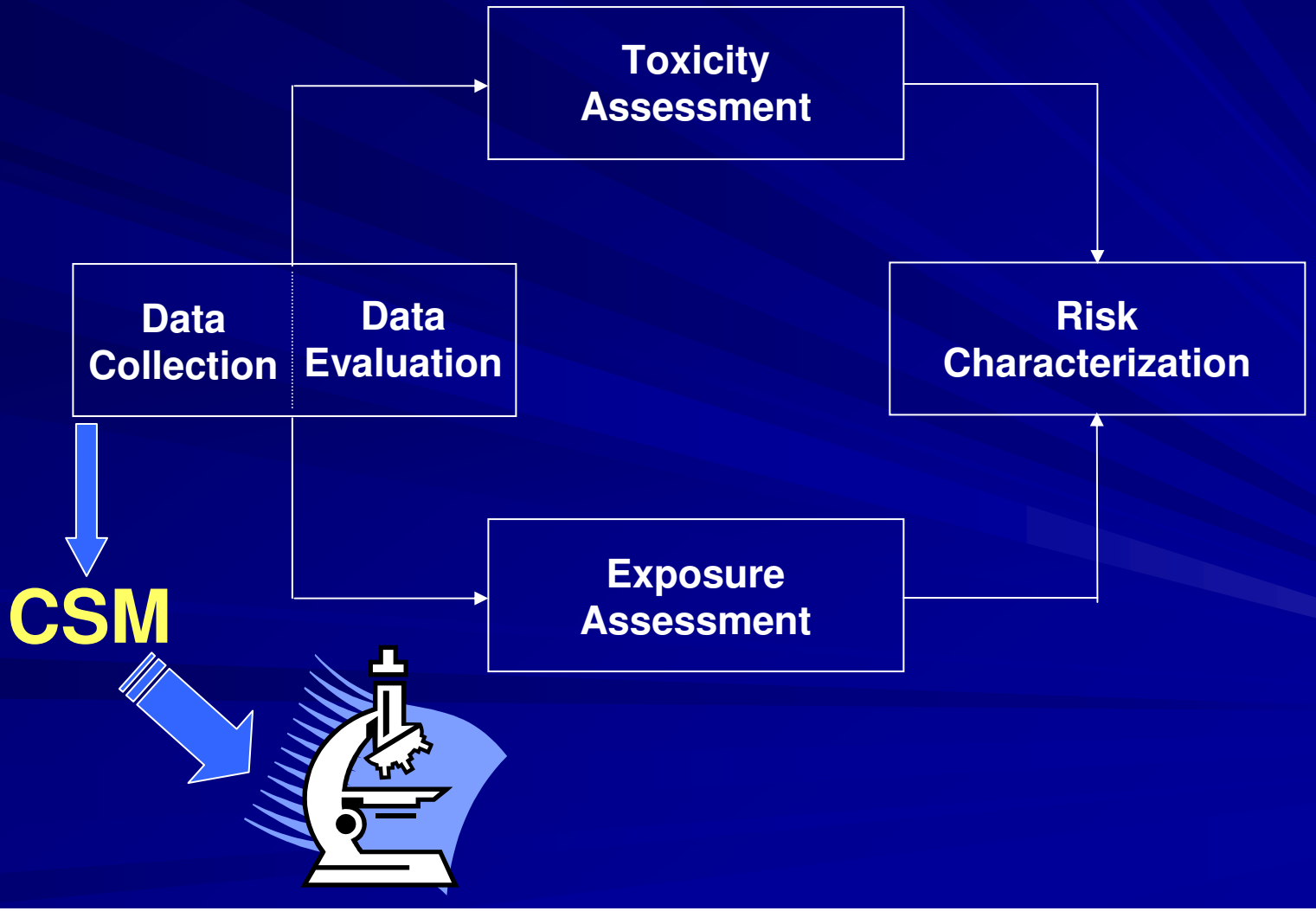
"The formulation of a problem is often more essential than its solution"

Albert Einstein

Insert photo of AE here

Baseline Risk Assessment

Conceptual Site Model (CSM)



Purpose of Conceptual Site Model

- Identifies sources of environmental contamination
- Shows how contaminant at the original point of release might move in the environment
- Identifies the different categories of people that might come in contact with contaminated media
- Lists potential exposure pathways that may occur for each category

Operable Unit 4

- Large and complex sites can be divided into “Operable Units” (OUs) to phase the cleanup and/or expedite early action
- Libby Site divided into multiple OUs
- OU4 is defined as residential, commercial, industrial, and public properties, including schools and parks, within the defined boundary

OU4 Conceptual Site Model

- Sources of contamination
- Environmental transport and contaminated media
- Receptors
- Potential exposure pathways
  - Reasonable
  - Plausible

OU4 CSM Pathway

KEY	
●	Pathway is complete and exposure may be significant; quantitative evaluation is warranted
O	Pathway is complete but is believed to be minor in comparison to other pathways; qualitative evaluation in warranted
?	Pathway may be complete but magnitude of exposure is uncertain; further investigation may be necessary
	Pathway is incomplete or believed to be negligible; further evaluation is not warranted

The CSM serves as a blueprint for future investigations and may be updated as new information becomes available.

Questions?